

AUTHOR INDEX

Achiwa, K., 123
Adachi, S., 245
Ajisaka, K., 291
Arshava, B. M., 103
Azuma, J.-I., 277

Beaupère, D., 301
Bekker, A. R., 49
Beyer, E. M., 255
Blanc-Muesser, M., 59
Brillouet, J.-M., 219
Browne, P., 285

Calle, P., 19
Chandrasekaran, R., 1
Chun, B., 277
Coleman, A. W., 307
Cserháti, T., 165
Cucinotta, V., 95
Cunningham, D., 285
Czubarow, P., 327

D'Alessandro, F., 95
Das, S., 331
Defaye, J., 29
Demaily, G., 301
Dheilly, L., 301
Driguez, H., 29, 59

El Ashry, E. S. H., 41
El Khadem, H., 327
El Kilany, Y., 41

Fréchou, C., 301
Fujihara, M., 343

Galons, H., 307
Gautier, C., 29
Ghosal, P. K., 331

Haga, M., 237
Hamid, H. A., 41
Hasegawa, A., 175, 185
Hervé du Penhaut, C., 219
Hindsgaul, O., 83
Hirota, T., 245
Honda, A., 201

Ikeda, K., 123
Ilyina, G. S., 255
Impellizzeri, G., 95

Ishida, H., 175
Itoh, T., 245
Iwata, T., 277

Jarosz, S., 73

Katsuragawa, M., 237
Kihio, T., 201, 237
Kiso, M., 175, 185
Kitamura, S., 111, 311
Kobayashi, Y., 141
Köll, P., 273
Kopf, J., 273
Koroteev, M. P., 49
Kozlova, I. K., 255

Lee, E., 285
Lehmann, J., 59
Ling, C.-C., 307

Marchessault, R. H., 133
McArdle, P., 285
Meguro, H., 319
Michon, V., 219
Mikerin, I. E., 103
Mikhaylova, M. A., 255
Miyazaki, T., 209
Morf, M., 273
Morita, M., 319
Moutoumet, M., 219
Muramoto, M., 277
Murata, Y., 111, 311

Nagai, K., 201, 237
Nagao, Y., 123
Nagumo, T., 343
Nakajima, H., 245
Nevskii, N. N., 49
Nifant'ev, E. E., 49
Nikitenko, A. A., 103
Nishijima, M., 209

Ogawa, H., 175, 185
Ohru, H., 319
Okamura, K., 277
Orgeret, C., 29

Parrot-Lopez, H., 307
Petrus, L., 273
Petrushová, M., 273

Radha, A., 1
Raifeld, Yu. E., 103
Rashed, N., 41
Ray, B., 331
Ricard, S., 133
Rioux, P., 133

Saito, K., 209
Sanchez, A., 19
Sandstedt, C., 327
Saulnier, L., 219
Seillier, E., 29
Shirakabe, M., 291
Sieiro, C., 19
Srivastava, G., 83
Stankowski, J. D., 337
Steck, J., 59
Sychev, V. A., 49
Szejtli, J., 165

Takeo, K., 111, 311
Tanaka, K., 141
Thailambal, V. G., 1

Toba, T., 245
Tsuchiya, T., 141

Ukai, S., 201, 237
Umemura, E., 141
Urbahns, K., 59
Uzan, R., 301

Van Boom, J. H., 193
Van der Klein, P. A. M., 193
Vasyanina, L. K., 49
Vecchio, G., 95
Vid, G. Ya., 103
Vigne, L., 59

Wiederschain, G. Ya., 255

Yoshida, I., 201

Zeller, S. G., 337
Zhang, P., 307
Zimmer, B., 273

SUBJECT INDEX

O-(*N*-Acetyl- α -neuraminosyl)-(2 \rightarrow 9)-*O*-(*N*-acetyl- α -neuraminosyl)-(2 \rightarrow 3)- β -lactosylceramide, synthesis of, 185

S-(*N*-Acetyl- α -neuraminosyl)-(2 \rightarrow 9)-*O*-(*N*-acetyl-9-thio- α -neuraminosyl)-(2 \rightarrow 3)- β -lactosylceramide, synthesis of, 175

Action of Cu(II) salts on osazones: side reactions of osotriazole formation, 327

Alginates, effect of the content of D-mannuronic acid and L-guluronic acid blocks on the anti-tumor activity of, 343

Alkaline degradation of disaccharides in methyl sulfoxide, an e.s.r. study, 19

β -D-Allopyranose 1,3,4,6- and 1,2,3,6-tetra-acetates, n.m.r. and X-ray studies, 285

Allyl-D-xylopyranose and its use in the preparation of xylo-oligosaccharides, a facile synthesis of 4-*O*-, 311

Amanita muscaria, structure and antitumor activity of a branched (1 \rightarrow 3)- β -D-glucan from, 237

4,8-Anhydro-3-deoxy-3-nitro-D-lyxo-D-glucuronitol, crystal and molecular structure, 273

Antitumor activity of a branched (1 \rightarrow 3)- β -D-glucan from *Amanita muscaria*, 237

Arabinogalactan-protein, investigations of the structure of grape, 219

Cellobiosaccharides, 4-thio-, synthesis and use, for the separation of cellobiohydrolases, 29

Cellulose mixed esters regioselectively substituted by acetyl and propanoyl groups, preparation and n.m.r. assignments of, 277

Chloro-3'-deoxykanamycin A, synthetic study of methyl 3-deoxy-3-fluoro- α -D-glucopyranosides from methyl 2,3-anhydro- α -D-allopyranosides and synthesis of 3'-deoxy-3'-fluorokanamycin A and 3'-, 141

Chlorodimethylthexylsilane, protection of the hydroxyl groups in cyclomaltoheptaose (β -cyclodextrin) by use of, 307

CMP-Kdo synthetase inhibitor (2-deoxy- β -Kdo), synthesis, 319

CMP-sialic acid analogs, synthesis of sialic acid-containing nucleotide sugars, 123

Crystal and molecular structure of 4,8-anhydro-3-deoxy-3-nitro-D-lyxo-D-glucuronitol, 273

Cyclic sulfates in the synthesis of 6-deoxy-D-manno-heptopyranose derivatives, application of, 193

Cyclodextrin, use of chlorodimethylthexylsilane for protecting the hydroxyl groups in, 307

Cyclomaltoheptaose (β -cyclodextrin), synthesis and conformation of dihistamine derivatives of, 95

Cyclomaltoheptaose (β -cyclodextrin), use of chlorodimethylthexylsilane for protecting the hydroxyl groups in, 307

Cyclomalto-oligosaccharides, inclusion complexes of some non-ionic surfactants with, 165

2-Deoxy- β -Kdo, a potent CMP-Kdo synthetase inhibitor, synthesis of, 319

6-Deoxy-D-manno-heptopyranose derivatives, application of cyclic sulfates in the synthesis of, 193

Dihistamine derivatives of cyclomaltoheptaose (β -cyclodextrin), synthesis and conformation, 95

Disaccharides, an e.s.r. study of alkaline degradation in methyl sulfoxide, 19

Disaccharides containing an α -L-fucosyl group, synthesis by use of α -L-fucosidases of, 291

E.s.r. study of the alkaline degradation of disaccharides in methyl sulfoxide, 19

Ferrites in lignocellulosics, *in situ* synthesis of, 133

Fluorokanamycin A and 3'-chloro-3'-deoxykanamycin A, synthetic study of methyl 3-deoxy-3-fluoro- α -D-glucopyranosides from methyl 2,3-anhydro- α -D-allopyranosides and synthesis of 3'-deoxy-3'-, 141

α -L-Fucosyl-containing disaccharides, synthesis by use of α -L-fucosidases of, 291

Ganglioside GD₃, synthesis of a position isomer having an α -Neu5Ac-(2 \rightarrow 9)- α -Neu5Ac linkage, 185

Ganglioside GD₃, synthesis of a thioglycosidically linked, position-isomeric analog of, 175

Gellan double helix: an X-ray study, roles of potassium ions, acetyl and L-glyceryl groups in native, 1

(1 \rightarrow 3)- β -D-Glucan from the alkaline extract of *Amanita muscaria*, structure and antitumor activity, 237

(1 \rightarrow 3)- α -D-Glucans and (1 \rightarrow 3)- β -D-glucans, *O*-(carboxymethyl)ated, the distribution of carboxymethyl groups in, 201

D-glycero-Pentose and its ethyl furanosides, 2,3-dideoxy-3-C-methylene-, total stereo- and enantio-selective synthesis of, 103

Glycolipid hydrolases, human lysosomal, use of glycosides of 6- and 8-acylamino-4-methylumbelliferoine in the study of, 255

C-Glycosyl compounds, synthesis by a Wittig-type reaction promoted by zinc of, 301

Grape arabinogalactan-protein, investigations of the structure of, 219

L-Guluronic acid and D-mannuronic acid blocks, effect on the antitumor activity of alginates of the content of, 343

Heptopyranose derivatives, application of cyclic sulfates in the synthesis of 6-deoxy-D-manno-193

Heteroglycan isolated from the fungus *Omphalia lapidescens*, structure of a, 209

Higher-carbon sugars, preparation by stereoselective osmylation of related allylic alcohols, 73

In situ synthesis of ferrites in lignocellulosics, 133

Inclusion complexes of some non-ionic surfactants with cyclomalto-oligosaccharides, 165

Inhibitors of pancreatic alpha-amylase, spacer-modified disaccharide and pseudo-trisaccharide methyl glycosides that mimic maltotriose as competitive, 59

Investigations of the structure of grape arabinogalactan-protein, 219

Lactococcus lactis subsp. *cremoris* SBT 0495, structure of the extracellular polysaccharide from slime-forming, 245

Lignocellulosics, *in situ* synthesis of ferrites in, 133

Maltotriose, spacer-modified disaccharide and pseudo-trisaccharide methyl glycosides that mimic, as competitive inhibitors of pancreatic alpha-amylase, 59

D-Mannuronic acid and L-guluronic acid blocks, effect on the antitumor activity of alginates of the content of, 343

4-Methylumbelliferoine glycosides, 6- and 8-acylamino-, use in the study of human lysosomal glycolipid hydrolases of, 255

N.m.r. study of the 1,3,4,6- and 1,2,3,6-tetra-acetates of β -D-allopyranose and the X-ray structure of the former, 285

Nelumbo nucifera, structural studies of a polysaccharide from the seeds of, 331

Nigero-oligosaccharides, synthesis of, 111

Nonitol, crystal and molecular structure of 4,8-anhydro-3-deoxy-3-nitro-D-lyxo-D-gluco-, 273

C-Nucleoside analogues, novel types of acyclic, via the reaction of hydrogen bromide in acetic acid with L-threo-(glycerol-1-yl)-pyrazolinediones, 41

Omphalia lapidescens, structure of a heteroglycan isolated from the fungus, 209

Osazones: side reactions of osotriazole formation, action of Cu(II) salts on, 327

Osmylation of allylic alcohols, preparation of higher-carbon sugars by stereoselective, 73

Osotriazole formation, action of Cu(II) salts on osazones: side reactions of, 327

Pentasaccharide that would be formed by glycosylation of a tetrasaccharide acceptor with a β (1 \rightarrow 3)-N-acetylglucosaminyltransferase, synthesis of a, 83

1,2,4-Phosphites of α -D-xylopyranose, synthesis, structure, and transformations, 49

Polysaccharide from the seeds of *Nelumbo nucifera*, structural studies of a, 331

Preparation and n.m.r. assignments of cellulose mixed esters regioselectively substituted by acetyl and propanoyl groups, 277

Preparation of higher-carbon sugars by stereoselective osmylation of related allylic alcohols, 73

Pyrazolinediones, L-threo-(glycerol-1-yl)pyrazolinediones, novel types of acyclic C-nucleosides, 41

Reductive-cleavage method, location of the O-acetyl group in welan by, 337

Regioselectively substituted by acetyl and propanoyl groups, preparation and n.m.r. assignments of cellulose mixed esters, 277

Roles of potassium ions, acetyl and L-glyceryl groups in native gellan double helix: an X-ray study, 1

Sialic acid-containing nucleotide sugars: CMP-sialic acid analogs, synthesis of, 123

S-(α -Sialosyl)-(2 \rightarrow 9)-O-(9-thio- α -sialosyl)-(2 \rightarrow 3')- β -lactosylceramide, synthesis of an, 175

Spacer-modified disaccharide and pseudo-trisaccharide methyl glycosides that mimic maltotriose, as competitive inhibitors of pancreatic alpha-amylase, 59

Structure of a heteroglycan isolated from the fungus *Omphalia lapidescens*, 209

Structure of the extracellular polysaccharide from slime-forming *Lactococcus lactis* subsp. *cremoris* SBT 0495, 245

Surfactants, inclusion complexes with cyclomalto-oligosaccharides of some non-ionic, 165

Synthesis and conformation of dihistamine derivatives of cyclomaltoheptaose (β -cyclodextrin), 95

Synthesis of 4-O-allyl-D-xylopyranose and its use in the preparation of xylo-oligosaccharides, a facile, 311

Synthesis of a tetrasaccharide acceptor for use in the assay of a $\beta(1 \rightarrow 3)$ -N-acetylglucosaminyltransferase and the pentasaccharide that would be formed by its enzymic glycosylation, 83

Synthesis of nigero-oligosaccharides, 111

Synthesis of sialic acid-containing nucleotide sugars: CMP-sialic acid analogs, 123

Synthesis, structure, and transformations of 1,2,4-phosphites of α -D-xylopyranose, 49

Synthetic study of methyl 3-deoxy-3-fluoro- α -D-glucopyranosides from methyl 2,3-anhydro- α -D-allopyranosides and synthesis of 3'-deoxy-3'-fluorokanamycin A and 3'-chloro-3'-deoxykanamycin A, 141

Tetra-acetates of β -D-allopyranose, n.m.r. and X-ray studies of the 1,3,4,6- and 1,2,3,6-, 285

Tetrasaccharide acceptor for use in the assay of a $\beta(1 \rightarrow 3)$ -N-acetylglucosaminyltransferase, synthesis of a, 83

Trichoderma reesei, separation by affinity chromatography of cellobiohydrolases of, 29

Umbelliferone glycosides, 4-methyl-6- and -8-acylamino-, use in the study of hydrolases of, 255

Welan, location of the O-acetyl group in, by the reductive-cleavage method, 337

Wittig-type reaction promoted by zinc, synthesis of C-glycosyl compounds by a, 301

X-Ray study, roles of potassium ions, acetyl and L-glycerol groups in native gellan double helix: an, 1

Xylo-oligosaccharides, a facile synthesis of 4-O-allyl-D-xylopyranose and its use in the preparation of, 311

α -D-Xylopyranose 1,2,4-phosphites, synthesis, structure, and transformations, 49

Zinc, synthesis of C-glycosyl compounds by a Wittig-type reaction promoted by, 301